VZCZCXRO1336
RR RUEHLN RUEHVK RUEHYG
DE RUEHTA #0616/01 0811158
ZNR UUUUU ZZH
R 211158Z MAR 08
FM AMEMBASSY ASTANA
TO RUEHC/SECSTATE WASHDC 2115
INFO RUCNCIS/CIS COLLECTIVE 0451

UNCLAS SECTION 01 OF 03 ASTANA 000616

SIPDIS

DEPARTMENT FOR OES/STC, SCA/RA, AND SCA/CEN

SENSITIVE

SIPDIS

E.O. 12958: N/A
TAGS: TSPL EAGR KSCA PREL PGOV KZ
SUBJECT: KAZAKHSTAN - SCIENCE AND TECHNOLOGY - NUCLEAR TECHNOLOGY AND NATURAL RESOURCES

SUMMARY

¶1. (U) EST officer's January 20 - February 19 TDY visit to Kazakhstan provided a timely opportunity to discuss the Kazakhstani government's science and technology (S&T) infrastructure, particularly in light of continued negotiations on a bilateral Science and Technology Agreement. This cable focuses on nuclear technology and natural resources issues. It is one of a series of four cables summarizing EST officer's meetings in Kazakhstan. End Summary.

MINISTRY OF ENERGY AND MINERAL RESOURCES

¶2. (SBU) EST officer met with Yevgeniy Ryaskov, deputy head of the Department of Technological Development and State Asset Management at the Ministry of Energy and Mineral Resources. Ryaskov stated that the Ministry of Energy coordinates research through its subsidiary organizations. These subsidiaries include Kazatomprom, which conducts applied research into nuclear materials, and the National Nuclear Center of Kazakhstan (NNC), which focuses on non-proliferation, seismic issues, and nuclear energy issues. Ryaskov stated the NNC currently cooperates with Los Alamos national labs and has a number of cooperation agreements with the U.S. Department of Defense and the U.S. Department of Energy. This cooperation includes management and security of the Polygon nuclear test site, cooperation on the decommissioning of the BN-350 reactor and collaboration on seismic statistics. Ryaskov stated past cooperation has been very helpful and he would like to see it expanded. The ministry is in the process of establishing a research site for nuclear medicine and Ryaskov expressed interest in working with the National Institutes of Health. Ryaskov added that Kazakhstan plans to build a number of new power stations. Kazakhstan would be interested in cooperation focused on personnel training as well as applied nuclear research.

¶3. (SBU) Following the meeting with Ryaskov, EST officer met with Sergei Berezin, Head of the Co-ordination and Analysis Department, National Nuclear Center of Kazakhstan (NNC). Berezin said that the NNC currently has over 2000 employees of which 403 are of the PhD level and 26 are of the post-doctorate level. Berezin claimed that in a recent assessment of all research centers in Kazakhstan, the NNC was the most advanced and well equipped. According to Berezhin, the NNC has not benefited much from the Bolashak scholars program, but there are plans to send 40 students to study abroad who will return to work at the NNC. Berezin stated cooperation is good with the Department of Energy, Nuclear Regulatory Committee and the Department of Defense. Berezin would like to see more university cooperation including visiting professors, lecturers and internships.

INSTITUTE OF NUCLEAR PHYSICS

¶4. (SBU) EST officer met with Adil Tuleshev, Director of the Institute of Nuclear Physics (INP). The INP is located just outside Almaty. Tuleshev stated his institute is under the direction of the NNC. The institute focuses on nuclear physics, radiation, solid state physics, applied nuclear physics, accelerator technologies, environmental issues, and reactor investigations. The center has cooperated in the past through CRDF and according to Tuleshev has had strong contacts with Los Alamos, Argonne National Labs, DOE, and Halliburton. He also said that the INP is currently constructing a center for nuclear medicine and aspires to sell nuclear medicine on the global market. The INP has been allocated $60 million for this project. Tuleshev expressed his dissatisfaction with the Kazakhstani Tax Committee, noting that when INP cooperated with CRDF on the exchange of a particle accelerator, the accelerator was held up at the border because of tax problems. Tuleshev was glad to hear that a bilateral S&T agreement could overcome future tax issues. Tuleshev was particularly interested in expanding cooperation with the DOE and beginning cooperation with NIH.

¶5. (SBU) Following the meeting, Tuleshev took EST officer on a tour of the facilities where Tuleshev showed the WWR-K Highly Enriched Uranium test reactor as well as a number of labs including some of those recently constructed for the Nuclear Medicine Center and an accelerator. The facilities maintained a high-level security with military guards.

CENTER FOR EARTH SCIENCES, METALLURGY AND ORE

¶6. (SBU) EST officer met with Nuraly Bekturganov, Director-General of the Center for Earth Sciences, which is headquartered in Almaty. Bekturganov stated the center is in charge of seven institutions covering the fields of geology, hydrology, geography, nanotechnology, testing of technology, renewable energy, and metallurgy and mining. In the past, the center was part of the Ministry of Education, but after restructuring is now considered a government-owned joint stock company which reports to Especca, a government holding company. According to Bekturganov, the center was granted $2 million to begin a research program on nanotechnology and $500,000 to research renewable energy, including solar, wind, hydro, and bio-energy. Although Bekturganov expressed his dismay, saying that these amounts were not adequate to begin such a program, he was hopeful that if the center were to establish partnerships with the U.S., it could receive more funding. In Bekturganov's opinion, possible areas for cooperation include nano-technology, metallurgy, uranium extraction, and the copper industry. Bekturganov also mentioned the Managesa "cosmic rays station" located near the Baikinor Cosmodome. Bekturganov would like to see NASA and the European Space Agency (ESA) cooperate in this effort to form an international cosmic ray station.

EURASIAN UNIVERSITY

¶7. (SBU) EST officer met with Dr. Askar Zhussupbekov, President of Eurasia University in Astana. Zhussupbekov was very interested in future cooperation with U.S. universities. He stated that Eurasian University currently has a joint degree program with the University of New Mexico and would like to expand this program to other universities. Zhussupbekov noted that Eurasia University is one of two universities in Kazakhstan that is internationally accredited with a three-tier western degree structure (BA, MA, PhD). Zhussupbekov expressed interest in cooperation in the fields of physics, math, biology, chemistry, humanities, Turkic history, economics, and nuclear-track research. Zhussupbekov introduced EST officer to Kazbek Baktybekov, Vice-Rector of Research, who showed the particle accelerator the university procured last year.

KAZAKH-BRITISH TECHNICAL UNIVERSITY

¶8. (SBU) EST officer met with Professor Baigunchekov, assistant to the Rector of the Kazakh-British Technical University (KBTU). The university is located in Almaty in the old Supreme Soviet of the Kazakhstan SSR. Founded in 2002 as a joint venture with Great Britain, the university issues western-modeled degrees and has over 1500 students. The major departments of the university are economics, ITC, and energy. According to Baigunchekov, KBTU cooperates extensively with several universities in Great Britain, including the London School of Economics, Imperial College, and Cambridge University. The bulk of the university's research is conducted via commissioned grants from the Ministry of Education and Ministry of Industry and Trade. KazMuniaGas (KMG) also provides substantial funding through contracts for research in the oil and gas sector. KMG's main interest areas include boring, exploring, processing, and collecting oil and gas. Baigunchekov stated he is very interested in future cooperation with U. S. universities and experts.

KAZAKH NATIONAL TECHNICAL UNIVERSITY

¶9. (SBU) EST officer met with Dr. Malis Absametov, Vice-Rector for Research at the Kazakh National Technical University (NTU) in Almaty. Absametov stated that the university's priority areas of teaching and study include mining, metallurgy, geology, energy, ITC, machinery, and ecology. The university has over 18,000 students and a staff of over 1,000. According to Absametov, the university is currently working with the National Innovation Fund to establish an ITC park outside Almaty. Absametov stated that NTU has very strong cooperative ties with the University of Colorado, MIT, and Stanford. NTU is also engaged in sea floor mapping of the Aral and Caspian Seas; as a landlocked country, Kazakhstan would welcome additional cooperation on related issues. Absametov is interested in further cooperation with U.S. universities.

OTHER UNVERSITIES VISITED

¶10. (SBU) EST officer visited Karaganda State Technical University, E.A. Buketov Karaganda State University, and Al-Farabi University. Each of these universities had limited contact with U.S. researchers. The reaction to possible cooperation was positive.

There was mention in Karaganda about both universities participating in the creation of a research center focused on coal gasification.

COMMENT

¶11. (SBU) In the nuclear sector, Kazakhstan already has a number of established contacts with the Department of Energy, Department of Defense, and the Nuclear Regulatory Committee. As Kazakhstan seeks to expand into other areas of nuclear science, namely nuclear medicine, it would be worthwhile to foster contacts with the National Institutes of Health and the National Science Fund, as both sides could potentially benefit from additional collaborative research projects.

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